Dell™ Inspiron™ N4020/N4030 Service Manual

Before You Begin
Battery
Hard Drive
Optical Drive
Module Cover
Memory Module(s)
Keyboard
Wireless Mini-Card
Palm Rest
Power Button Board
Display
Camera
Internal Card With Bluetooth® Wireless Technology
System Board
Coin-Cell Battery
Thermal Cooling Assembly
Processor Module
I/O Board
Speakers
Battery Latch Assembly
Flashing the BIOS

Notes, Cautions, and Warnings

NOTE: A NOTE indicates important information that helps you make better use of your computer.

CAUTION: A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

WARNING: A WARNING indicates a potential for property damage, personal injury, or death.

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Regulatory model P07G series Regulatory type P07G001; P07G003

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Module Cover

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- Removing the Module Cover
- Replacing the Module Cover

WARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance.

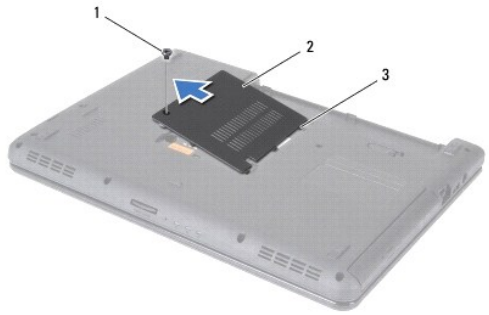
CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.

CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

CAUTION: To help prevent damage to the system board, remove the main battery (see Removing the Battery) before working inside the computer.

Removing the Module Cover

1. Follow the instructions in Before You Begin.
2. Remove the battery (see Removing the Battery).
3. Remove the screw that secures the module cover to the computer base.
4. Using the notch on the computer base, lift and slide the module cover tabs out of the slots on the computer base.



1	screw	2	module cover
3	tabs (3)		

Replacing the Module Cover

1. Follow the instructions in Before You Begin.
2. Slide the three tabs on the module cover into the slots on the computer base and gently snap the module cover into place.
3. Replace the screw that secures the module cover to the computer base.
4. Replace the battery (see Replacing the Battery).

CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

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Battery Latch Assembly

Dell™ Inspiron™ N4020/N4030 Service Manual

- Removing the Battery Latch Assembly
- Replacing the Battery Latch Assembly

WARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance.

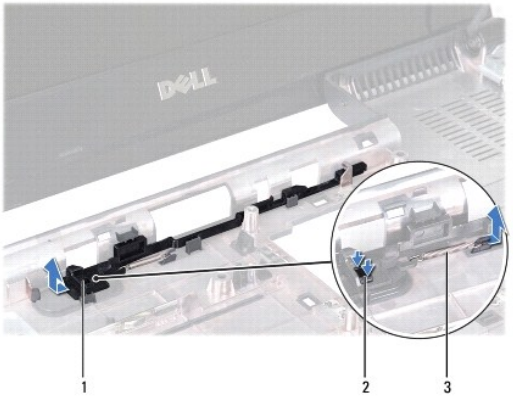
CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on the back of the computer).

CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.

CAUTION: To help prevent damage to the system board, remove the main battery (see Removing the Battery) before working inside the computer.

Removing the Battery Latch Assembly

1. Follow the instructions in Before You Begin.
2. Follow the instructions from step 2 to step 13 in Removing the System Board.
3. Remove the I/O board (see Removing the I/O Board).
4. Press and push the plastic clips on battery release latch to release it from the battery latch assembly.
5. Using a small screwdriver, remove the latch spring on the battery latch assembly.
6. Slide the battery latch assembly to the side and remove it from the computer base.



1	battery latch assembly	2	plastic clips
3	latch spring		

Replacing the Battery Latch Assembly

1. Follow the instructions in Before You Begin.
2. Slide the battery latch assembly into place.
3. Using a small screwdriver, place the latch spring over the hook on the battery latch assembly.
4. Push the plastic clips on the battery release latch into the hole on the battery latch assembly to secure the battery release latch.

5. Replace the I/O board (see Replacing the I/O Board).

6. Follow the instructions from step 6 to step 18 in Replacing the System Board.

CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

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Before You Begin

Dell™ Inspiron™ N4020/N4030 Service Manual

- Recommended Tools
- Turning Off Your Computer
- Before Working Inside Your Computer

This manual provides procedures for removing and installing components in your computer. Unless otherwise noted, each procedure assumes that the following conditions exist:

- You have performed the steps in Turning Off Your Computer and Before Working Inside Your Computer.
- You have read the safety information that shipped with your computer.
- A component can be replaced or—if purchased separately—installed by performing the removal procedure in the reverse order.

Recommended Tools

The procedures in this document may require the following tools:

- Small flat-blade screwdriver
- Phillips screwdriver
- Plastic scribe
- BIOS executable update program available at **support.dell.com**

Turning Off Your Computer

CAUTION: To avoid losing data, save and close all open files and exit all open programs before you turn off your computer.

1. Save and close all open files and exit all open programs.
2. Shut down the operating system:

   Windows® Vista:

   Click the Start button , click the arrow , and then click **Shut Down**.

   Windows® 7:

   Click the Start button and then click **Shut Down**.

3. Ensure that the computer is turned off. If your computer did not automatically turn off when you shut down the operating system, press and hold the power button until the computer turns off.

Before Working Inside Your Computer

Use the following safety guidelines to help protect your computer from potential damage and to help to ensure your own personal safety.

WARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance.

CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

CAUTION: Handle components and cards with care. Do not touch the components or contacts on a card. Hold a card by its edges or by its metal mounting bracket. Hold a component such as a processor by its edges, not by its pins.

CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.

CAUTION: When you disconnect a cable, pull on its connector or on its pull-tab, not on the cable itself. Some cables have connectors with locking tabs; if you are disconnecting this type of cable, press in on the locking tabs before you disconnect the cable. As you pull connectors apart, keep them evenly aligned to avoid bending any connector pins. Also, before you connect a cable, ensure that both connectors are correctly oriented and aligned.

CAUTION: To avoid damaging the computer, perform the following steps before you begin working inside the computer.

1. Ensure that the work surface is flat and clean to prevent the computer cover from being scratched.
2. Turn off your computer (see Turning Off Your Computer) and all attached devices.

CAUTION: To disconnect a network cable, first unplug the cable from your computer and then unplug the cable from the network device.

3. Disconnect all telephone or network cables from the computer.
4. Press and eject any installed cards from the 5-in-1 media card reader.
5. Disconnect your computer and all attached devices from their electrical outlets.
6. Disconnect all attached devices from your computer.

CAUTION: To help prevent damage to the system board, remove the main battery (see Removing the Battery) before working inside the computer.

7. Remove the battery (see Removing the Battery).
8. Turn the computer top-side up, open the display, and press the power button to ground the system board.

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Flashing the BIOS

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1. Turn on the computer.
2. Go to **support.dell.com/support/downloads**.
3. Click **Select Model**.
4. Locate the BIOS update file for your computer:

   NOTE: The Service Tag for your computer is located at the bottom of the computer.

   If you have your computer's Service Tag:

   a. Click **Enter a Service Tag**.

   b. Enter your computer's Service Tag in the **Enter a service tag:** field, click **Go**, and proceed to step 5.

   If you do not have your computer's Service Tag:

   a. Select the type of product in the **Select Your Product Family** list.

   b. Select the product brand in the **Select Your Product Line** list.

   c. Select the product model number in the **Select Your Product Model** list.

   NOTE: If you have selected a different model and want to start over again, click **Start Over** on the top right of the menu.

   d. Click **Confirm**.
5. A list of results appear on the screen. Click **BIOS**.
6. Click **Download Now** to download the latest BIOS file.
   The **File Download** window appears.
7. Click **Save** to save the file on your desktop. The file downloads to your desktop.
8. Click **Close** if the **Download Complete** window appears.
   The file icon appears on your desktop and is titled the same as the downloaded BIOS update file.
9. Double-click the file icon on the desktop and follow the instructions on the screen.

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Internal Card With Bluetooth® Wireless Technology

Dell™ Inspiron™ N4020/N4030 Service Manual

- Removing the Bluetooth Card
- Replacing the Bluetooth Card

WARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance.

CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.

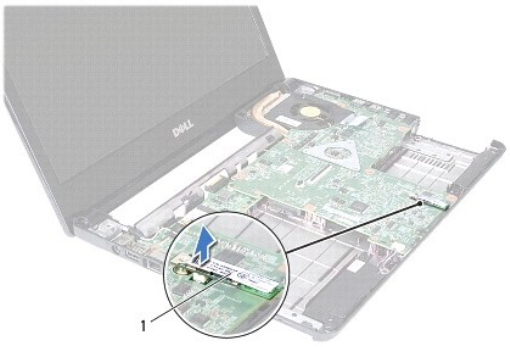
CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

CAUTION: To help prevent damage to the system board, remove the main battery (see Removing the Battery) before working inside the computer.

If you ordered a card with Bluetooth wireless technology with your computer, it is already installed.

Removing the Bluetooth Card

1. Follow the instructions in Before You Begin.
2. Remove the battery (see Removing the Battery).
3. Follow the instructions from step 3 to step 4 in Removing the Hard Drive.
4. Follow the instructions from step 3 to step 5 in Removing the Optical Drive.
5. Remove the module cover (see Removing the Module Cover).
6. Remove the memory module(s) (see Removing the Memory Module(s)).
7. Remove the keyboard (see Removing the Keyboard).
8. Remove the palm rest (see Removing the Palm Rest).
9. Lift the Bluetooth card to disconnect it from the connector on the system board.



1	Bluetooth card

Replacing the Bluetooth Card

1. Follow the instructions in Before You Begin.
2. Align the connector on the Bluetooth card with the connector on the system board and press the Bluetooth card until it is fully seated.

3. Replace the palm rest (see Replacing the Palm Rest).
4. Replace the keyboard (see Replacing the Keyboard).
5. Replace the memory module(s) (see Replacing the Memory Module(s)).
6. Replace the module cover (see Replacing the Module Cover).
7. Follow the instructions from step 3 to step 4 in Replacing the Optical Drive.
8. Follow the instructions from step 4 to step 5 in Replacing the Hard Drive.
9. Replace the battery (see Replacing the Battery).

CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

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Camera

Dell™ Inspiron™ N4020/N4030 Service Manual

- Removing the Camera
- Replacing the Camera

WARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance.

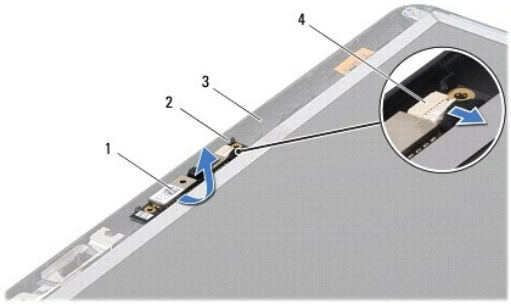
CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.

CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

CAUTION: To help prevent damage to the system board, remove the main battery (see Removing the Battery) before working inside the computer.

Removing the Camera

1. Follow the instructions in Before You Begin.
2. Remove the battery (see Removing the Battery).
3. Follow the instructions from step 3 to step 4 in Removing the Hard Drive.
4. Follow the instructions from step 3 to step 5 in Removing the Optical Drive.
5. Remove the module cover (see Removing the Module Cover).
6. Remove the memory module(s) (see Removing the Memory Module(s)).
7. Remove the keyboard (see Removing the Keyboard).
8. Remove the palm rest (see Removing the Palm Rest).
9. Remove the display assembly (see Removing the Display Assembly).
10. Remove the display bezel (see Removing the Display Bezel).
11. Disconnect the camera cable from the connector on the camera module.
12. Slide and lift the camera module to remove it from the tabs on the display cover.
13. Lift the camera module out of the display cover.



1	camera module	2	tabs (2)
3	display cover	4	camera cable connector

Replacing the Camera

1. Follow the instructions in Before You Begin.
2. Secure the camera module using the tabs on the display cover.
3. Connect the camera cable to the connector on the camera module.
4. Replace the display bezel (see Replacing the Display Bezel).
5. Replace the display assembly (see Replacing the Display Assembly).
6. Replace the palm rest (see Replacing the Palm Rest).
7. Replace the keyboard (see Replacing the Keyboard).
8. Replace the memory module(s) (see Replacing the Memory Module(s)).
9. Replace the module cover (see Replacing the Module Cover).
10. Follow the instructions from step 3 to step 4 in Replacing the Optical Drive.
11. Follow the instructions from step 4 to step 5 in Replacing the Hard Drive.
12. Replace the battery (see Replacing the Battery).

CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

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Coin-Cell Battery

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- Removing the Coin-Cell Battery
- Replacing the Coin-Cell Battery

WARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance.

CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.

CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

CAUTION: To help prevent damage to the system board, remove the main battery (see Removing the Battery) before working inside the computer.

Removing the Coin-Cell Battery

1. Follow the instructions in Before You Begin.
2. Follow the instructions from step 2 to step 14 in Removing the System Board.
3. Use a plastic scribe to pry up the coin-cell battery from the slot on the system board.

1	plastic scribe	2	coin-cell battery

Replacing the Coin-Cell Battery

1. Follow the instructions in Before You Begin.
2. Hold the coin-cell battery with the positive side up.
3. Slide the coin-cell battery into the slot and gently press until it snaps in place.
4. Follow the instructions from step 5 to step 18 in Replacing the System Board.

CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

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Processor Module

Dell™ Inspiron™ N4020/N4030 Service Manual

- Removing the Processor Module
- Replacing the Processor Module

WARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance.

CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.

CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

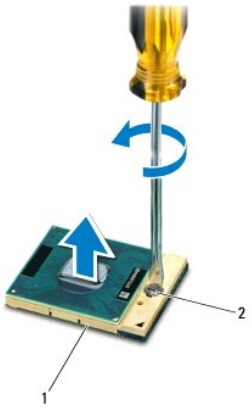
CAUTION: To prevent intermittent contact between the ZIF-socket cam screw and the processor module when removing or replacing the processor, press to apply slight pressure to the center of the processor module while turning the cam screw.

CAUTION: To avoid damage to the processor module, hold the screwdriver so that it is perpendicular to the processor module when turning the cam screw.

CAUTION: To help prevent damage to the system board, remove the main battery (see Removing the Battery) before working inside the computer.

Removing the Processor Module

1. Follow the instructions in Before You Begin.
2. Remove the thermal cooling assembly (see Removing the Thermal Cooling Assembly).
3. To loosen the ZIF socket, use a small, flat-blade screwdriver and rotate the ZIF-socket cam screw counterclockwise until it comes to the cam stop.



1	ZIF socket	2	ZIF-socket cam screw

CAUTION: To ensure maximum cooling for the processor module, do not touch the heat transfer areas on the processor thermal-cooling assembly. The oils in your skin can reduce the heat transfer capability of the thermal pads.

CAUTION: When removing the processor module, lift the module straight up. Be careful not to bend the pins on the processor module.

4. Lift the processor module from the ZIF socket.

Replacing the Processor Module

NOTE: If a new processor module is installed, you will receive a new thermal-cooling assembly, which will include an affixed thermal pad, or you will receive a new thermal pad along with documentation to illustrate proper installation.

1. Follow the instructions in Before You Begin.
2. Align the pin-1 corner of the processor module with the pin-1 corner of the ZIF socket, then place the processor module.

NOTE: The pin-1 corner of the processor module has a triangle that aligns with the triangle on the pin-1 corner of the ZIF socket.

When the processor module is properly seated, all four corners are aligned at the same height. If one or more corners of the module are higher than the others, the module is not seated properly.

CAUTION: To avoid damage to the processor module, hold the screwdriver perpendicular to the processor module when turning the cam screw.

3. Tighten the ZIF socket by turning the cam screw clockwise to secure the processor module to the system board.
4. Replace the thermal cooling assembly (see Replacing the Thermal Cooling Assembly).

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Thermal Cooling Assembly

Dell™ Inspiron™ N4020/N4030 Service Manual

- Removing the Thermal Cooling Assembly
- Replacing the Thermal Cooling Assembly

WARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance.

WARNING: If you remove the thermal cooling assembly from the computer when the heat sink is hot, do not touch the metal housing of the thermal cooling assembly.

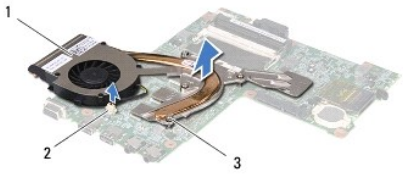
CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.

CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

CAUTION: To help prevent damage to the system board, remove the main battery (see Removing the Battery) before working inside the computer.

Removing the Thermal Cooling Assembly

1. Follow the instructions in Before You Begin.
2. Follow the instructions from step 2 to step 14 in Removing the System Board.
3. Disconnect the fan cable from the connector on the system board.
4. In sequential order (indicated on the thermal cooling assembly), loosen the four captive screws that secure the assembly to the system board.
5. Lift the thermal cooling assembly off the system board.



1	thermal cooling assembly	2	fan cable connector
3	captive screws (4)		

Replacing the Thermal Cooling Assembly

NOTE: This procedure assumes that you have already removed the thermal cooling assembly and are ready to replace it.

1. Follow the instructions in Before You Begin.
2. Place the thermal cooling assembly on the system board.
3. Align the four captive screws on the thermal cooling assembly with the screw holes on the system board and tighten the screws in sequential order (indicated on the thermal cooling assembly).
4. Connect the fan cable to the connector on the system board.
5. Follow the instructions from step 5 to step 18 in Replacing the System Board.

CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

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Display

Dell™ Inspiron™ N4020/N4030 Service Manual

- Display Assembly
- Display Bezel
- Display Panel

WARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance.

CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.

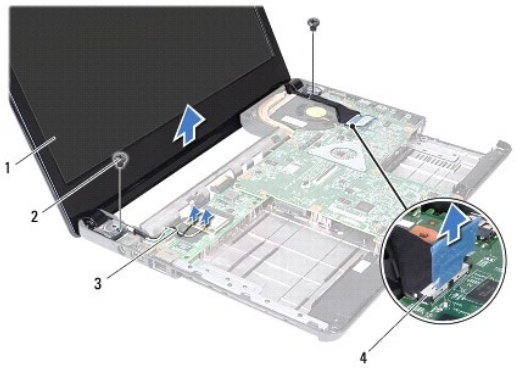
CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

CAUTION: To help prevent damage to the system board, remove the main battery (see Removing the Battery) before working inside the computer.

Display Assembly

Removing the Display Assembly

1. Follow the instructions in Before You Begin.
2. Remove the battery (see Removing the Battery).
3. Follow the instructions from step 3 to step 4 in Removing the Hard Drive.
4. Follow the instructions from step 3 to step 5 in Removing the Optical Drive.
5. Remove the module cover (see Removing the Module Cover).
6. Remove the memory module(s) (see Removing the Memory Module(s)).
7. Remove the keyboard (see Removing the Keyboard).
8. Remove the palm rest (see Removing the Palm Rest).
9. Disconnect the antenna cables from the Mini-Card (see Removing the Mini-Card) and remove the antenna cables from the routing guides.
10. Disconnect the display cable from the connector on the system board.
11. Remove the two screws (one on each side) that secure the display assembly to the computer base.
12. Lift and remove the display assembly out of the computer base.



1	display assembly	2	screws (2)
3	Mini-Card antenna cables	4	display cable connector

Replacing the Display Assembly

1. Follow the instructions in Before You Begin.
2. Place the display assembly in position and replace the two screws (one on each side) that secure the display assembly to the computer base.
3. Connect the display cable to the connector on the system board.
4. Route the antenna cables through the routing guides and connect the cables to the Mini-Card (see Replacing the Mini-Card).
5. Replace the palm rest (see Replacing the Palm Rest).
6. Replace the keyboard (see Replacing the Keyboard).
7. Replace the memory module(s) (see Replacing the Memory Module(s)).
8. Replace the module cover (see Replacing the Module Cover).
9. Follow the instructions from step 3 to step 4 in Replacing the Optical Drive.
10. Follow the instructions from step 4 to step 5 in Replacing the Hard Drive.
11. Replace the battery (see Replacing the Battery).

CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

Display Bezel

Removing the Display Bezel

CAUTION: The display bezel is extremely fragile. Be careful when removing it to prevent damaging the bezel.

1. Follow the instructions in Before You Begin.
2. Remove the display assembly (see Removing the Display Assembly).
3. Make a note of the Mini-Card antenna cables and the display cable routing on the display hinges.
4. Using your fingertips, carefully pry up the inside edge of the display bezel.
5. Remove the display bezel.

1	display bezel	2	display hinges (2)

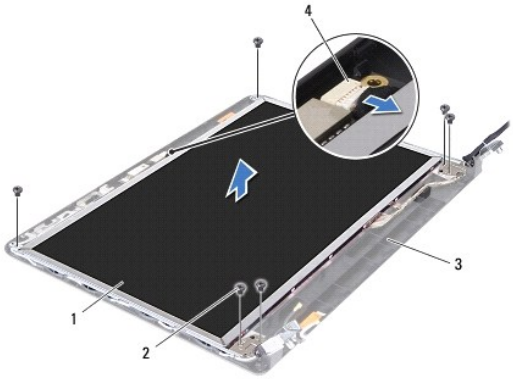
Replacing the Display Bezel

1. Follow the instructions in Before You Begin.
2. Route the Mini-Card antenna cables and the display cable on the display hinges.
3. Realign the display bezel over the display panel, and gently snap into place.
4. Replace the display assembly (see Replacing the Display Assembly).

Display Panel

Removing the Display Panel

1. Follow the instructions in Before You Begin.
2. Remove the display assembly (see Removing the Display Assembly).
3. Remove the display bezel (see Removing the Display Bezel).
4. Disconnect the camera cable from the connector on the camera module.
5. Remove the six screws that secure the display panel to the display cover.

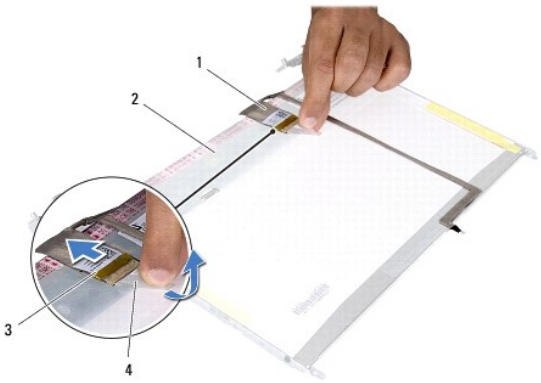


1	display panel	2	screws (6)
3	display cover	4	camera cable connector

6. Lift the display panel off the display cover.
7. Turn the display panel over and place it on a clean surface.
8. Lift the tape that secures the display cable to the display-board connector and disconnect the display cable.

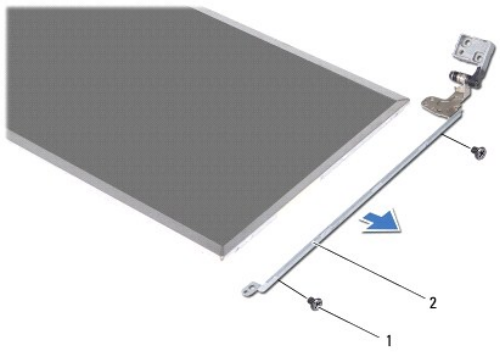
NOTE: The camera cable is affixed to the back of the display panel.

9. Remove the camera cable.



1	display cable	2	back of the display panel
3	display-board connector	4	tape

10. Remove the four screws (two on each side) that secure the display-panel brackets to the display panel.



1	screws (4)	2	display-panel brackets (2)

Replacing the Display Panel

1. Follow the instructions in Before You Begin.
2. Replace the four screws (two on each side) that secure the display-panel brackets to the display panel.
3. Adhere the camera cable at the back of the display panel.
4. Connect the display cable to the display-board connector and secure it with the tape.
5. Align the screw holes on the display panel with the screw holes on the display cover and replace the six screws.
6. Connect the camera cable to the connector on the camera module.
7. Replace the display bezel (see Replacing the Display Bezel).
8. Replace the display assembly (see Replacing the Display Assembly).

△ **CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.**

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Hard Drive

Dell™ Inspiron™ N4020/N4030 Service Manual

- Removing the Hard Drive
- Replacing the Hard Drive

WARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance.

WARNING: If you remove the hard drive from the computer when the drive is hot, do not touch the metal housing of the hard drive.

CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.

CAUTION: To prevent data loss, turn off your computer (see Turning Off Your Computer) before removing the hard drive. Do not remove the hard drive while the computer is On or in Sleep state.

CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

CAUTION: Hard drives are extremely fragile. Exercise care when handling the hard drive.

CAUTION: To help prevent damage to the system board, remove the main battery (see Removing the Battery) before working inside the computer.

NOTE: Dell does not guarantee compatibility or provide support for hard drives from sources other than Dell.

NOTE: If you are installing a hard drive from a source other than Dell, you need to install an operating system, drivers, and utilities on the new hard drive (see the *Dell Technology Guide*).

Removing the Hard Drive

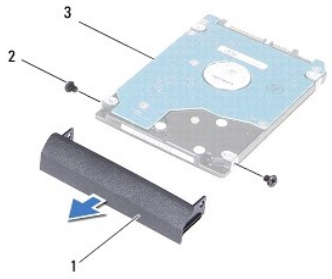
1. Follow the instructions in Before You Begin.
2. Remove the battery (see Removing the Battery).

CAUTION: When the hard drive is not in the computer, store it in protective antistatic packaging (see "Protecting Against Electrostatic Discharge" in the safety instructions that shipped with your computer).

3. Remove the two screws that secure the hard-drive assembly to the computer base.
4. Slide the hard-drive assembly out of the hard-drive compartment.

1	hard-drive assembly	2	screws (2)

5. Remove the two screws that secure the hard-drive bezel to the hard drive.
6. Pull the hard-drive bezel away from the hard drive.



1	hard-drive bezel	2	screws (2)
3	hard drive		

Replacing the Hard Drive

1. Follow the instructions in Before You Begin.
2. Remove the new drive from its packaging.
   Save the original packaging for storing or shipping the hard drive.
3. Align the screw holes on the hard-drive bezel with the screw holes on the hard drive and replace the two screws.
4. Slide the hard-drive assembly into the hard-drive compartment until it is fully seated.
5. Replace the two screws that secure the hard-drive assembly to the computer base.
6. Replace the battery (see Replacing the Battery).

CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

7. Install the operating system for your computer, as needed. See "Restoring Your Operating System" in the *Setup Guide*.
8. Install the drivers and utilities for your computer, as needed. For more information, see the *Dell Technology Guide*.

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I/O Board

Dell™ Inspiron™ N4020/N4030 Service Manual

- Removing the I/O Board
- Replacing the I/O Board

WARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance.

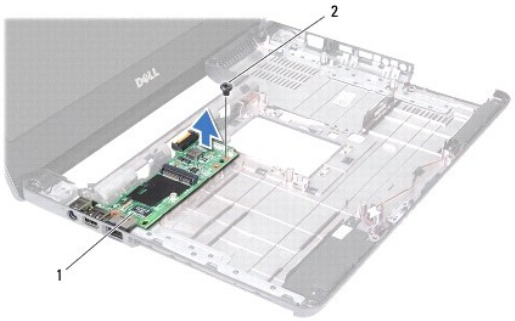
CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.

CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

CAUTION: To help prevent damage to the system board, remove the main battery (see Removing the Battery) before working inside the computer.

Removing the I/O Board

1. Follow the instructions in Before You Begin.
2. Follow the instructions from step 2 to step 13 in Removing the System Board.
3. Remove the Mini-Card (see Removing the Mini-Card).
4. Remove the screw that secures the I/O board to the computer base.
5. Lift the I/O board out of the computer base.



1	I/O board	2	screw

Replacing the I/O Board

1. Follow the instructions in Before You Begin.
2. Align the connectors on the I/O board with the slots on the computer base.
3. Replace the screw that secures the I/O board to the computer base.
4. Replace the Mini-Card (see Replacing the Mini-Card).
5. Follow the instructions from step 6 to step 18 in Replacing the System Board.

CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

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Keyboard

Dell™ Inspiron™ N4020/N4030 Service Manual

- Removing the Keyboard
- Replacing the Keyboard

WARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance.

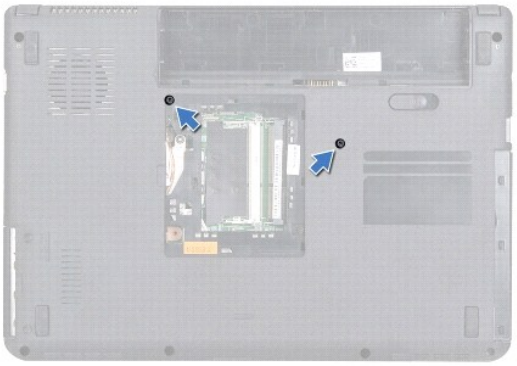
CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.

CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

CAUTION: To help prevent damage to the system board, remove the main battery (see Removing the Battery) before working inside the computer.

Removing the Keyboard

1. Follow the instructions in Before You Begin.
2. Remove the battery (see Removing the Battery).
3. Follow the instructions from step 3 to step 4 in Removing the Hard Drive.
4. Follow the instructions from step 3 to step 5 in Removing the Optical Drive.
5. Remove the module cover (see Removing the Module Cover).
6. Remove the memory module(s) (see Removing the Memory Module(s)).
7. Remove the two screws that secure the keyboard to the computer base.



8. Turn the computer over and open the display as far as possible.

CAUTION: The keycaps on the keyboard are fragile, easily dislodged, and time-consuming to replace. Be careful when removing and handling the keyboard.

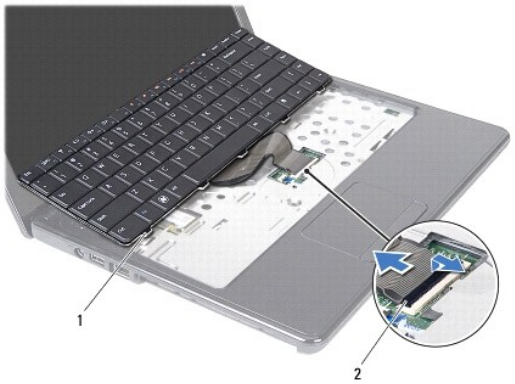
9. Press the keyboard and slide it downwards.
10. Slide a plastic scribe between the keyboard and palm rest and pry and lift the keyboard to disengage it from the tabs on the palm rest.

1	plastic scribe	2	keyboard

11. Slide the tabs on the keyboard out of the slots on the palm rest.
12. Ease the keyboard up until it clears off the palm rest.

CAUTION: Be extremely careful when removing and handling the keyboard. Failure to do so could result in scratching the display panel.

13. Without pulling hard on the keyboard, hold it towards the display.
14. Lift the connector latch that secures the keyboard cable to the connector on the system board and remove the keyboard cable.
15. Lift the keyboard off the computer.



1	keyboard tabs (5)	2	keyboard cable connector

Replacing the Keyboard

1. Follow the instructions in Before You Begin.
2. Slide the keyboard cable into the connector on the system board. Press down on the connector latch to secure the keyboard cable to the connector on the system board.
3. Slide the tabs at the bottom of the keyboard into the slots on the palm rest.
4. Gently press around the edges of the keyboard and slide it upwards to secure the keyboard under the tabs on the palm rest.
5. Close the display and turn the computer over.
6. Replace the two screws that secure the keyboard to the computer base.

7. Replace the memory module(s) (see Replacing the Memory Module(s)).
8. Replace the module cover (see Replacing the Module Cover).
9. Follow the instructions from step 3 to step 4 in Replacing the Optical Drive.
10. Follow the instructions from step 4 to step 5 in Replacing the Hard Drive.
11. Replace the battery (see Replacing the Battery).

CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

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Memory Module(s)

Dell™ Inspiron™ N4020/N4030 Service Manual

- Removing the Memory Module(s)
- Replacing the Memory Module(s)

WARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance.

CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.

CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

CAUTION: To help prevent damage to the system board, remove the main battery (see Removing the Battery) before working inside the computer.

You can increase your computer memory by installing memory modules on the system board. See "Specifications" in your *Setup Guide* for information on the type of memory supported by your computer.

NOTE: Memory modules purchased from Dell™ are covered under your computer warranty.

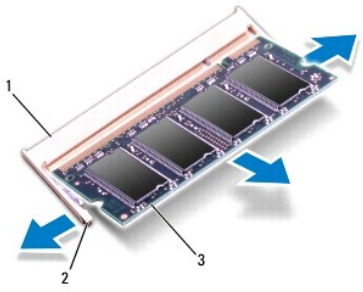
Your computer has two user-accessible SO-DIMM sockets, labeled DIMM A and DIMM B, that can be accessed from the bottom of the computer.

Removing the Memory Module(s)

1. Follow the instructions in Before You Begin.
2. Remove the battery (see Removing the Battery).
3. Remove the module cover (see Removing the Module Cover).

CAUTION: To prevent damage to the memory-module connector, do not use tools to spread the memory module securing clips.

4. Use your fingertips to carefully spread apart the securing clips on each end of the memory-module connector until the module pops up.
5. Remove the memory module from the memory-module connector.



1	memory-module connector	2	securing clips (2)
3	memory module		

Replacing the Memory Module(s)

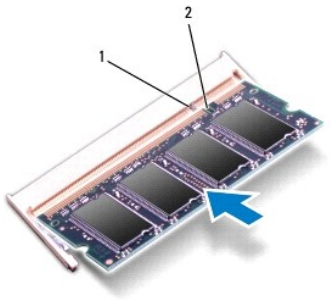
CAUTION: If you need to install memory modules in two connectors, install a memory module in the connector labeled "DIMM A" before you install a memory module in the connector labeled "DIMM B."

1. Follow the instructions in Before You Begin.

2. Align the notch in the memory module with the tab in the memory- module connector.

3. Slide the memory module firmly into the slot at a 45-degree angle, and press the memory module down until it clicks into place. If you do not hear the click, remove the memory module and reinstall it.

NOTE: If the memory module is not installed properly, the computer may not boot.



1	tab	2	notch

4. Replace the module cover (see Replacing the Module Cover).

5. Replace the battery (see Replacing the Battery), or connect the AC adapter to your computer and an electrical outlet.

CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

6. Turn on the computer.

As the computer boots, it detects the memory module(s) and automatically updates the system configuration information.

To confirm the amount of memory installed in the computer:

Windows® Vista:

Click **Start** → **Help and Support**→ **Dell System Information**.

Windows® 7:

Click **Start** → **Control Panel**→ **System and Security**→ **System**.

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Wireless Mini-Card

Dell™ Inspiron™ N4020/N4030 Service Manual

- Removing the Mini-Card
- Replacing the Mini-Card

WARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance.

CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.

CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

CAUTION: To help prevent damage to the system board, remove the main battery (see Removing the Battery) before working inside the computer.

CAUTION: When the Mini-Card is not in the computer, store it in protective antistatic packaging (see "Protecting Against Electrostatic Discharge" in the safety instructions that shipped with your computer).

NOTE: Dell does not guarantee compatibility or provide support for Mini-Cards from sources other than Dell.

If you ordered a wireless Mini-Card with your computer, the card is already installed.

Your computer supports one half Mini-Card slot — Wireless Local Area Network (WLAN), Wi-Fi, or Worldwide Interoperability for Microwave Access (WiMax).

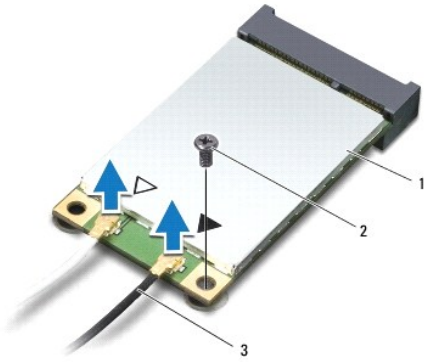
NOTE: Depending on the configuration of the computer when it was sold, the Mini-Card slots may or may not have Mini-Cards installed in them.

Removing the Mini-Card

1. Follow the instructions in Before You Begin.
2. Remove the battery (see Removing the Battery).
3. Follow the instructions from step 3 to step 4 in Removing the Hard Drive.
4. Follow the instructions from step 3 to step 5 in Removing the Optical Drive.
5. Remove the module cover (see Removing the Module Cover).
6. Remove the memory module(s) (see Removing the Memory Module(s)).
7. Remove the keyboard (see Removing the Keyboard).

CAUTION: When you disconnect a cable, pull on its connector or on its pull-tab, not on the cable itself. Some cables have connectors with locking tabs; if you are disconnecting this type of cable, press in on the locking tabs before you disconnect the cable. As you pull connectors apart, keep them evenly aligned to avoid bending any connector pins. Also, before you connect a cable, ensure that both connectors are correctly oriented and aligned.

8. Disconnect the antenna cables from the Mini-Card.



1	Mini-Card	2	securing screw	3	antenna cables (2)

9. Remove the screw that secures the Mini-Card to the connector on the I/O board.
10. Lift the Mini-Card out of the I/O board connector.

Replacing the Mini-Card

1. Follow the instructions in Before You Begin.
2. Remove the new Mini-Card from its packaging.

CAUTION: Use firm and even pressure to slide the card into place. If you use excessive force, you may damage the connector.

CAUTION: The connectors are keyed to ensure correct insertion. If you feel resistance, check the connectors on the card and on the system board, and realign the card.

CAUTION: To avoid damage to the Mini-Card, never place cables under the card.

3. Insert the Mini-Card connector at a 45-degree angle into the appropriate I/O board connector.
4. Press the other end of the Mini-Card down into the slot on the I/O board and replace the screw that secures the Mini-Card to the I/O board.
5. Connect the appropriate antenna cables to the Mini-Card you are installing. The following table provides the antenna cable color scheme for each Mini-Card supported by your computer.

Connectors on the Mini-Card	Antenna Cable Color Scheme
WLAN (2 antenna cables)	

Main WLAN (white triangle)	white
Auxiliary WLAN (black triangle)	black

6. Secure the unused antenna cables in the protective mylar sleeve.
7. Replace the keyboard (see Replacing the Keyboard).
8. Replace the memory module(s) (see Replacing the Memory Module(s)).
9. Replace the module cover (see Replacing the Module Cover).
10. Follow the instructions from step 3 to step 4 in Replacing the Optical Drive.
11. Follow the instructions from step 4 to step 5 in Replacing the Hard Drive.
12. Replace the battery (see Replacing the Battery).

CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

13. Install the drivers and utilities for your computer, as required. For more information, see the *Dell Technology Guide*.

NOTE: If you are installing a wireless Mini-Card from a source other than Dell, you must install the appropriate drivers and utilities. For more generic driver information, see the *Dell Technology Guide*.

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Optical Drive

Dell™ Inspiron™ N4020/N4030 Service Manual

- Removing the Optical Drive
- Replacing the Optical Drive

WARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance.

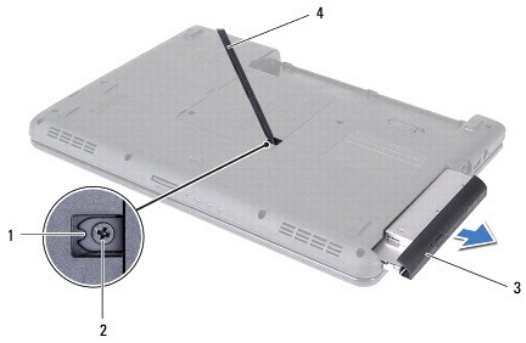
CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.

CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

CAUTION: To help prevent damage to the system board, remove the main battery (see Removing the Battery) before working inside the computer.

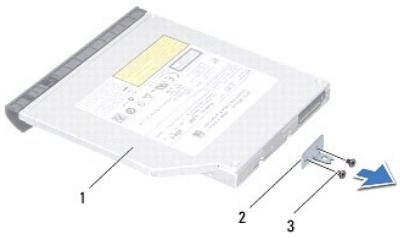
Removing the Optical Drive

1. Follow the instructions in Before You Begin.
2. Remove the battery (see Removing the Battery).
3. Remove the screw that secures the optical-drive assembly to the computer base.
4. Using a plastic scribe, push the notch to remove the optical drive from the optical-drive bay.
5. Slide the optical-drive assembly out of the optical-drive compartment.



1	notch	2	screw
3	optical-drive assembly	4	plastic scribe

6. Remove the two screws that secure the optical-drive bracket to the optical drive.



1	optical drive	2	optical-drive bracket
3	screws (2)		

Replacing the Optical Drive

1. Follow the instructions in Before You Begin.
2. Align the screw holes on the optical-drive bracket with the screw holes on the optical drive and replace the two screws.
3. Slide the optical-drive assembly into the optical-drive compartment until it is fully seated.
4. Replace the screw that secures the optical-drive assembly to the computer base.
5. Replace the battery (see Replacing the Battery).

△ **CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.**

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Palm Rest

Dell™ Inspiron™ N4020/N4030 Service Manual

- Removing the Palm Rest
- Replacing the Palm Rest

WARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance.

CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.

CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

CAUTION: To help prevent damage to the system board, remove the main battery (see Removing the Battery) before working inside the computer.

Removing the Palm Rest

1. Follow the instructions in Before You Begin.
2. Remove the battery (see Removing the Battery).
3. Follow the instructions from step 3 to step 4 in Removing the Hard Drive.
4. Follow the instructions from step 3 to step 5 in Removing the Optical Drive.
5. Remove the module cover (see Removing the Module Cover).
6. Remove the memory module(s) (see Removing the Memory Module(s)).
7. Remove the six screws that secure the palm rest to the computer base.

8. Remove the keyboard (see Removing the Keyboard).

CAUTION: Pull on the plastic tab on top of the connectors to avoid damaging the connectors.

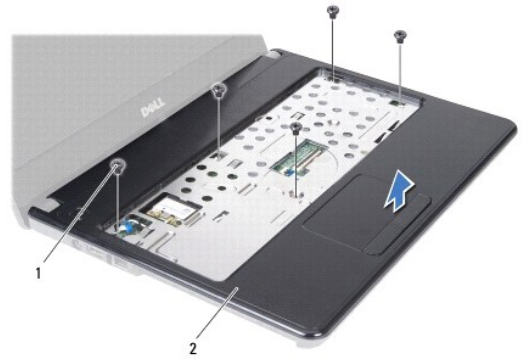
9. Disconnect the touch pad cable and the power button cable from the connectors on the system board.

1	power button cable	2	touch pad cable

10. Remove the five screws on the palm rest.

CAUTION: Carefully separate the palm rest from the computer base to avoid damage to the palm rest.

11. Starting at the right/left of the palm rest, use your fingers to separate the palm rest from the computer base.
12. Lift the palm rest off the computer base.



1	screws (5)	2	palm rest

Replacing the Palm Rest

1. Follow the instructions in Before You Begin.
2. Align the palm rest on the computer base and gently snap the palm rest into place.
3. Replace the five screws on the palm rest.
4. Connect the touch pad cable and the power button cable to the connectors on the system board.
5. Replace the keyboard (see Replacing the Keyboard).
6. Replace the six screws that secure the palm rest to the computer base.
7. Replace the memory module(s) (see Replacing the Memory Module(s)).
8. Replace the module cover (see Replacing the Module Cover).
9. Follow the instructions from step 3 to step 4 in Replacing the Optical Drive.
10. Follow the instructions from step 4 to step 5 in Replacing the Hard Drive.

11. Replace the battery (see Replacing the Battery).

CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

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Power Button Board

Dell™ Inspiron™ N4020/N4030 Service Manual

- Removing the Power Button Board
- Replacing the Power Button Board

WARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance.

CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.

CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

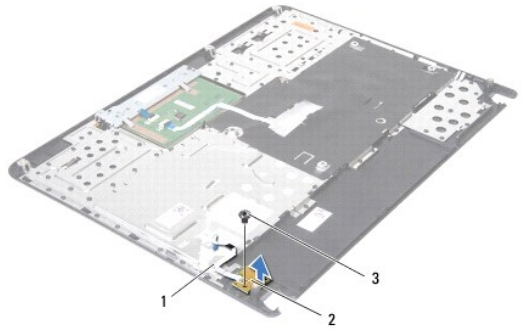
CAUTION: To help prevent damage to the system board, remove the main battery (see Removing the Battery) before working inside the computer.

Removing the Power Button Board

1. Follow the instructions in Before You Begin.
2. Remove the battery (see Removing the Battery).
3. Follow the instructions from step 3 to step 4 in Removing the Hard Drive.
4. Follow the instructions from step 3 to step 5 in Removing the Optical Drive.
5. Remove the module cover (see Removing the Module Cover).
6. Remove the memory module(s) (see Removing the Memory Module(s)).
7. Remove the keyboard (see Removing the Keyboard).
8. Remove the palm rest (see Removing the Palm Rest).
9. Turn the palm rest over.
10. Remove the screw that secures the power button board to the palm rest.

NOTE: The power button board cable is affixed to the palm rest.

11. Carefully release the power button board cable from the palm rest.
12. Lift the power button board off the palm rest.



1	power button board cable	2	power button board
3	screw		

Replacing the Power Button Board

1. Follow the instructions in Before You Begin.
2. Align the screw hole on the power button board with the screw hole on the palm rest and replace the screw.
3. Adhere the power button board cable on the palm rest.
4. Turn the palm rest over.
5. Replace the palm rest (see Replacing the Palm Rest).
6. Replace the keyboard (see Replacing the Keyboard).
7. Replace the memory module(s) (see Replacing the Memory Module(s)).
8. Replace the module cover (see Replacing the Module Cover).
9. Follow the instructions from step 3 to step 4 in Replacing the Optical Drive.
10. Follow the instructions from step 4 to step 5 in Replacing the Hard Drive.
11. Replace the battery (see Replacing the Battery).

△ **CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.**

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Battery

Dell™ Inspiron™ N4020/N4030 Service Manual

- Removing the Battery
- Replacing the Battery

WARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance.

CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.

CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

CAUTION: To avoid damage to the computer, use only the battery designed for this particular Dell computer. Do not use batteries designed for other Dell computers.

Removing the Battery

1. Follow the instructions in Before You Begin.
2. Shut down the computer and turn it over.
3. Slide the battery release latch to the unlock position.
4. Slide and lift the battery out of the battery bay.

1	battery	2	battery release latch

Replacing the Battery

1. Follow the instructions in Before You Begin.
2. Align the tabs on the battery with the slots on the battery bay.
3. Slide the battery into the battery bay until it clicks into place.

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Speakers

Dell™ Inspiron™ N4020/N4030 Service Manual

- Removing the Speakers
- Replacing the Speakers

WARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance.

CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.

CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

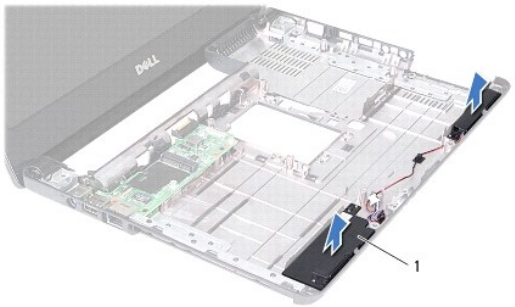
CAUTION: To help prevent damage to the system board, remove the main battery (see Removing the Battery) before working inside the computer.

Removing the Speakers

1. Follow the instructions in Before You Begin.
2. Follow the instructions from step 2 to step 13 in Removing the System Board.

NOTE: The speakers are affixed to the computer base.

3. Lift the speakers to peel it off from the computer base.
4. Make a note of the speakers cable routing and lift the speakers along with the cable, off the computer base.



1	speakers (2)

Replacing the Speakers

1. Follow the instructions in Before You Begin.
2. Adhere the speakers on the computer base.
3. Place the speakers on the computer base and route the speakers cable.
4. Follow the instructions from step 6 to step 18 in Replacing the System Board.

CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

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System Board

Dell™ Inspiron™ N4020/N4030 Service Manual

- Removing the System Board
- Replacing the System Board
- Entering the Service Tag in the BIOS

WARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance.

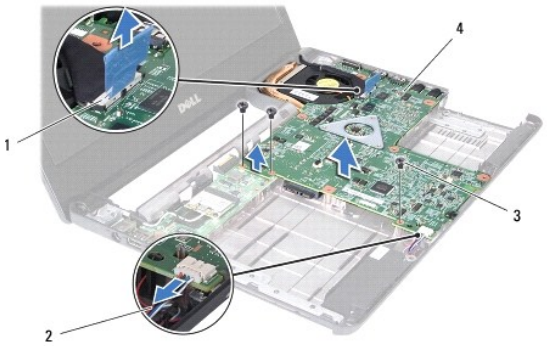
CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell™ is not covered by your warranty.

CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on your computer).

CAUTION: To help prevent damage to the system board, remove the main battery (see Removing the Battery) before working inside the computer.

Removing the System Board

1. Follow the instructions in Before You Begin.
2. Press and eject any installed card or blank from the 5-in-1 media card reader.
3. Remove the battery (see Removing the Battery).
4. Follow the instructions from step 3 to step 4 in Removing the Hard Drive.
5. Follow the instructions from step 3 to step 5 in Removing the Optical Drive.
6. Remove the module cover (see Removing the Module Cover).
7. Remove the memory module(s) (see Removing the Memory Module(s)).
8. Remove the keyboard (see Removing the Keyboard).
9. Remove the palm rest (see Removing the Palm Rest).
10. Remove the Bluetooth card (see Removing the Bluetooth Card).
11. Disconnect the display cable and the speakers cable from the connectors on the system board.
12. Remove the three screws that secure the system board assembly to the computer base.



1	display cable connector	2	speakers cable
3	screws (3)	4	system board

13. Lift the system board assembly to disconnect the connector on the system board from the connector on the I/O board.
14. Turn the system board assembly over.
15. Remove the coin-cell battery (see Removing the Coin-Cell Battery).
16. Remove the thermal cooling assembly (see Removing the Thermal Cooling Assembly).
17. Remove the processor module (see Removing the Processor Module).

Replacing the System Board

1. Follow the instructions in Before You Begin.
2. Replace the processor module (see Replacing the Processor Module).
3. Replace the thermal cooling assembly (see Replacing the Thermal Cooling Assembly).
4. Replace the coin-cell battery (see Replacing the Coin-Cell Battery).
5. Turn the system board assembly over.
6. Align the connectors on the system board with the slots on the computer base.
7. Gently press the system board to connect the connector on the system board to the connector on the I/O board.
8. Replace the three screws that secure the system board assembly to the computer base.
9. Connect the display cable and the speakers cable to the connectors on the system board.
10. Replace the Bluetooth card (see Replacing the Bluetooth Card).
11. Replace the palm rest (see Replacing the Palm Rest).
12. Replace the keyboard (see Replacing the Keyboard).
13. Replace the memory module(s) (see Replacing the Memory Module(s)).
14. Replace the module cover (see Replacing the Module Cover).
15. Follow the instructions from step 3 to step 4 in Replacing the Optical Drive.
16. Follow the instructions from step 4 to step 5 in Replacing the Hard Drive.
17. Replace the battery (see Replacing the Battery).
18. Replace any card or blank removed from the 5-in-1 media card reader.

CAUTION: Before turning on the computer, replace all screws and ensure that no stray screws remain inside the computer. Failure to do so may result in damage to the computer.

19. Turn on the computer.

NOTE: After you have replaced the system board, enter the computer Service Tag in the BIOS of the replacement system board.

20. Enter the service tag (see Entering the Service Tag in the BIOS).

Entering the Service Tag in the BIOS

1. Ensure that the AC adapter is plugged in and that the main battery is installed properly.

2. Turn on the computer.
3. Press <F2> during POST to enter the system setup program.
4. Navigate to the security tab and enter the service tag in the **Set Service Tag** field.

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Dell™ Inspiron™ N4020/N4030 Service Manual

NOTE: A NOTE indicates important information that helps you make better use of your computer.

CAUTION: A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

WARNING: A WARNING indicates a potential for property damage, personal injury, or death.

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